Book Reviews

Among the Elephants, by Iain and Oria Douglas-Hamilton. Collins, £3.95.

This is largely an autobiographical account of life in Lake Manyara National Park, Tanzania, during a four-year study of elephants. The book is intended for the general reader who will find here one of the few authoritative accounts of elephant behaviour and it should do much to dispel many of the myths surrounding this species. The lighter side of research life is described as well as the problems of housekeeping in the bush. There is an excellent collection of photographs to complement the text, but rather too many show elephants in truculent mood, often as the result of deliberate provocation in order to obtain a dramatic picture.

In some ways the Manyara elephants are an odd choice for a detailed study as they are not typical of other elephant populations, being relatively few in number and living in a small park at a very high density some four or five times above average. However, it is interesting to read that the social structure has not broken down despite the overcrowding, showing that high density per se is not deleterious provided the food supply is good, as it is here. The authors consider the perennial 'Elephant Problem' and imply that it has been solved at Manyara by opening up access to the neighbouring Marang Forest, but whether this really is a solution or merely a respite remains to be seen.

One cannot help feeling that the authors exaggerate the aggressiveness of elephants and give a false impression of the dangers of elephant research. Care is certainly necessary with such formidable creatures, but sensible precautions minimise the risks. Attempts to immobilise an elephant with only one dart can be expected to lead to the sort of disturbance of the animals and danger to the operator described here. This is obviously an important contribution to elephant biology, but the conclusions cannot be properly assessed without reference to the primary data, a procedure that at present involves a pilgrimage to the Bodleian in Oxford. It is to be hoped that the scientific results will soon be more readily available in published form.

S. K. ELTRINGHAM

Island Survivors: the Ecology of the Soay Sheep of St Kilda, edited by P. A. Jewell, C. Milner and J. Morton Boyd. Athlone Press, £8.

The St. Kilda archipelago is a place of superlatives: the most isolated islands and, probably, the windiest places in Britain, which provide breeding sites for the largest seabird colonies in the British Isles; the St. Kilda wren *Troglodytes troglodytes hirtensis* is one of only two vertebrates for the United Kingdom included in IUCN's *Red Data Book* and, to cap it all, the islands are inhabited by the most primitive breed of domestic sheep in Europe. *Island Survivors* describes the ecosystem of the largest of the four islands, Hirta (736 ha.), the character of its Soay sheep, and the natural process of regulation of their numbers. A continuous record of the sheep was maintained in 1952–72, and they were subjected to intensive study in 1959–67; the results are contained in the book's fourteen chapters by sixteen authors.

The principal objective was to unravel the natural controls of the sheep population, which is traced via genetics, population dynamics, social organisation, breeding cycles, behaviour, pasture composition, quality and utilisation, pathology and parasites. The island and its sheep provided unusual advantages for an ecological investigation, thanks to the simplicity and restricted size of the study area, the relative ease with which animals could be observed (there are no trees or scrub) and

captured, and the absence of predators and competitors. The result is a collection of very detailed and informative studies.

The Soay sheep has not only persisted for centuries, in spite of climatic vicissitudes and inbreeding, but has also apparently maintained relatively high densities within a restricted environment by adaptations in social structure, physiological response and resistance to parasites. Attention is drawn to the significance of this survival potential, both of the animals and their habitat, for the construction of models that can be tested in management practice and could have wider application to conservation of mammal populations whose range is restricted by human expansion in other parts of the world. There is an appendix on the development of a mathematical model for the Hirta system.

Occasionally, contributors lean fairly heavily on results of studies on commercial sheep to fill gaps in their observations, and the veterinarians have an irritating habit of using pathological terms without adequate explanation, but these complaints are relatively minor ones. The book is very readable and should form a valuable reference in the field of large herbivore ecology.

COLIN W. HOLLOWAY

Vanishing Wildlife of North America, by Thomas B. Allen. National Geographic Society, \$4.25.

No Further Retreat: The fight to save Florida, by Raymond F. Dasmann. Macmillan \$6.95.

Wilderness Areas of North America, by Ann and Myron Sutton. Funk and Wagnalls, \$10.00

The photographs are beautiful, the text is factual, the information is of unquestionable accuracy, the subject matter (vanishing wildlife) of considerable interest, the coverage excellent, and so how can there be quibble? We all know the wonder of National Geographic photographs, the terse words, the packed captions, and the magic formula has been exploited, time and time again, so how can there be doubt? "In autumn foliage, this virgin stand of trembling aspen on the eastern scarp of California's Sierra Nevada has escaped ax, saw and more ponderous machinery. Cut only by beavers, felled trees dam a tranquil pond". The picture is lovely, of course. One would give a tooth or two to be there at this moment. The next page—"lone buffalo, silhouetted where mountains meet grassland . . ."; another tooth gone. More pages, with manatees, bull elks, grizzlies, alligators, wolves—each picture more dramatic than the last. Even the extinct creatures are beautifully drawn, and properly described. So what can possibly be at fault?

The answer is nothing, save that I personally find no soul in these books, no quirkish individuality, nothing bizarre or surprising, and certainly nothing outrageous. They are chocolate boxes, and not a meal. They are glitter, and without the kind of gold we hope to find, just here and there, when someone creates the alchemy of thought into word. It should not all be lead – worthy, dependable, wholly functional and entirely incorruptible.

What better place could there possibly be to illustrate the conservation wars than Dasmann's Florida? It was easy to invade in the early days, rich with tropical growth, abundant with inlets and hiding places. Later on it was somewhat neglected, as richer pickings were found elsewhere. Eventually its very neglect, combined with its southerly position and exotic contents, meant that it could blossom as a play-ground for honeymooners, sun-worshippers, game-fisherman, rocket-launchers, and drainage-engineers. It became a place of conflict for all manner of new people, with the old natural residents likely to suffer whatever the outcome.

So the subject is important enough. Its author keeps on telling us so. He tells of the history, of the inhabitants, and something of the ecology and, like any meandering portion of the Everglades, he wanders this way and that, digressing at his